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14. (amended) A radio channel assignment method for assigning radio channels for carrying out radio communication between a base station and a plurality of radio terminals in a radio zone of said base station, comprising the step of each of said radio terminals determining a number of radio channels to be assigned to itself according to the rate of increase of stored data to be transmitted by that radio terminal per unit time.

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15. (amended) A radio channel assignment method for assigning radio channels for carrying out radio communication between a first base station and a plurality of radio terminals in a radio zone of said base station, comprising the step of said first base station transmitting to a second base station having a second radio zone, upon occurrence of a hand-over of communication with a first radio terminal from said first base station to said second base station, the number of radio channels that were assigned to said first radio terminal for communication with said first base station, such that said second base station may assign an equal number of radio channels in said second radio zone to said first radio terminal upon completion of said hand-over.--.

REMARKS

Claims 13-35 are now pending in this application. Claims 1-12 have been cancelled and new claims 16-35 have been added; additionally, claims 13-15 have been amended. Reconsideration of this application is requested.

Drawing Objection

Fig. 1 is proposed to be labeled as "PRIOR ART" as indicated in the accompanying Drawing Correction Approval Request. Withdrawal of this ground of objection is requested.

35 U.S.C. § 112 Rejection

Withdrawal of the indefiniteness rejection of claims 1-12 is requested to the extent that this ground of rejection may be applied to the claims now pending herein.

35 U.S.C. § 102 Rejections

The rejection of claim 13 as being anticipated by Kamm et al., U.S. Patent No. 5,457,680 ("Kamm") is respectfully traversed. Claim 13 is directed to a radio channel

assignment method in which each of a plurality of radio terminals determines a number of radio channels to be assigned to itself according to the rate of increase of stored data to be transmitted by that radio terminal per unit time.

Kamm discloses a method for managing the communication of data packets between a mobile radio terminal and a plurality of fixed base stations. Kamm discloses that the method includes allocating an additional channel to the mobile radio terminal when the forward data packet size is greater than a threshold value. This is shown at steps 614-616 in Fig. 1K. Kamm nowhere discloses or suggests the determination of a number of radio channels to be assigned to a radio terminal according to the rate of increase of stored data to be transmitted by that radio terminal per unit time, as disclosed and claimed in the present application.

The rejection of claim 15 as being anticipated by Strawczynski et al., U.S. Patent No. 5,239,676, also is traversed. Claim 15 is directed to a method of radio channel assignment wherein when a hand-over operation of communication with a radio terminal from one base station having a first radio zone to a second base station having a second radio zone is performed, the first base station transmits to the second base station the number of radio channels that were assigned to the radio terminal in the first radio zone, so that the second base station may assign an equal number of radio channels to the radio terminal when the radio terminal enters into the second radio zone.

Strawczynski relates to an intra-cell hand-over method wherein a radio terminal is switched from one channel in the radio zone of a base station to another channel in the same radio zone of the same base station. Strawczynski discloses that after a call has been established, a number of channels is set in reserve in the event that an intra-cell hand-over is required. A list of the available channels is scanned by the base station to make sure that a standby channel is available for hand-over if the need arises. This has no relevance to the feature of the invention as set forth in claim 15.

The rejection of claims 1, 9 and 14 as being anticipated by Dunn et al., U.S. Patent No. 5,625,877 ("Dunn"), also is respectfully traversed to the extent that this ground of rejection may be applied to claims 16-25. Dunn discloses a variable bandwidth wireless communication system, wherein a subscriber remote unit (SRU) prepares

communication data for transmission and sets a target address of the device to which the transmission is to be sent. The SRU then determines the size of the communication awaiting transmission, and a user of the SRU then decides whether to aggregate available air-link channels. See col. 13, ll. 1-4.

Contrary to the invention as claimed, Dunn fails to disclose a method wherein at least one radio channel is assigned to a first radio terminal in a radio zone; the amount of communication data to be sent from said first radio terminal to said base station is determined; when the amount of communication data is determined to be above a predetermined threshold representing acceptable data transmission capacity for the number of presently assigned radio channels, requesting of said base station an increase in the number of radio channels assigned to said first radio terminal; when the amount of communication data is determined to be below a predetermined threshold representing acceptable data transmission capacity for the number of presently assigned radio channels, requesting of said base station a decrease in the number of radio channels assigned to said first radio terminal; in response to a request for an increase in the number of radio channels assigned to said first radio terminal, determining whether a predetermined number of radio channels in said radio zone adjacent to the radio channel assigned to said first radio terminal are unassigned, and if so assigning said predetermined number of adjacent radio channels to said first radio terminal; if a predetermined number of radio channels in said radio zone adjacent to the radio channel assigned to said first radio terminal are not unassigned, reassigning adjacent radio channels presently assigned to other radio terminals of said plurality of radio terminals to said first radio terminal, and assigning said other radio terminals to other unassigned radio channels in said radio zone.

In contrast, each time a data message is prepared for transmission, the SRU determines the size and the user decides whether to transmit over a single channel or to aggregate. If channel aggregation is chosen, the master processor 105 instructs a search for available channels and reserves identified idle channels. The identity of the reserved idle channels is sent to the SRU, and the selected channels are assigned for transmission of the communication data. There is no assignment of adjacent channels or reassignment of previously assigned channels so as to make available a group of

adjacent channels for assignment to the radio terminal for transmission of communication data. Consequently, the rejection is not properly founded and should be withdrawn.

35 U.S.C. § 103 Rejections

The rejection of claims 2-5 and 10-12 as being unpatentable over Dunn in view of Krebs et al., U.S. Patent No. 5,448,759, and the rejection of claims 6-8 as being unpatentable over Dunn in view of Alperovich et al., U.S. Patent No. 5,940,763, are respectfully traversed to the extent that these grounds of rejection may be applied to claims 16-25 now pending.

Krebs relates to the use of a central processor for determining whether a message intended for a communication unit is of a first, second or third bandwidth. Depending upon the result of the determination, the processor transmits the message to the communication unit over a communication resource that is appropriate for the determined bandwidth. According to Krebs, the communication resource for the third bandwidth message is a multiple consecutive time slot communication channel. Krebs does not suggest reassignment of existing assigned channels to make available adjacent radio channels for assignment to a radio terminal in response to a request for an increase in assigned channels.

Alperovich discloses a preemption protocol in a mobile communication network, wherein a mobile station within a service area is initially allocated a full-rate channel, and when congestion occurs within the serving base station and no additional channel is available, the full-rate channel is divided into two half-rate channels. The mobile station is re-allocated to the half-rate channel via intra-cell hand-over and the other half-rate channel becomes available for a new call connection. Alperovich fails to cure the basic deficiency of Dunn with respect to the claimed invention in the independent claims and thus no combination of Dunn with Alperovich could result in the claimed invention.

Conclusion

In view of the foregoing, favorable reconsideration of this application, withdrawal of all outstanding grounds of rejection, and the issuance of a Notice of Allowance are earnestly solicited.

Please charge any fee or credit any overpayment pursuant to 37 CFR 1.16 or 1.17
to Deposit Account No. 02-2135.

RESPECTFULLY SUBMITTED,			
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Attachments: Marked-Up Copies of Amendments

MARKED-UP VERSION OF AMENDMENTS SHOWING CHANGES MADE

13. (amended) A radio channel assignment method for assigning radio channels for
carrying out radio communication between a base station and a plurality of radio
terminals in [the] a radio zone of said base station, [characterized in that] comprising
the step of said base station [determines] determining a number of radio channels to be
assigned to a first radio terminal according to the rate of increase of stored data to be
transmitted per unit time.

14. (amended) A radio channel assignment method for assigning radio channels for
carrying out radio communication between a base station and a plurality of radio
terminals in [the] a radio zone of said base station, [characterized in that] comprising
the step of each of said radio terminals [each determine] determining a number of radio
channels to be assigned to itself according to the rate of increase of stored data to be
transmitted by that radio terminal per unit time.

15. (amended) A radio channel assignment method for assigning radio channels for
carrying out radio communication between a first base station and a plurality of radio
terminals in [the] a radio zone of said base station, [characterized in that] comprising
the step of said first base station [transmits] transmitting to a second base station
having a second radio zone, upon occurrence of a hand-over of communication with a
first radio terminal from said first base station to said second base station, [a] the
number of radio channels that were assigned [channels] to said [base station with which
the radio terminal newly communicates] first radio terminal for communication with said
first base station, such that said second base station may assign an equal number of
radio channels in said second radio zone to said first radio terminal upon completion of
said hand-over.